

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/442,906	11/18/1999	SCOTT THOMAS MARCOTTE	EN999+121	6545
. 75	90 08/20/2003			
BLANCHE E SCHILLER ESQ			EXAMINER	
5 COLUMBIA			WILLETT, STEPHAN F	
ALBANY, NY 122035160			ART UNIT	PAPER NUMBER
			2141	12
			DATE MAILED: 08/20/2003	)3 '

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. 09/442,906

Applicant(s)

03/442

Marcotte

Office Action Summary

Examiner Stephan Willett Art Unit **2141** 

	The MAILING DATE of this communication appears	on the cover	sheet with	the correspondence address		
	for Reply					
	ORTENED STATUTORY PERIOD FOR REPLY IS SET MAILING DATE OF THIS COMMUNICATION.	T TO EXPIRE	3	_ MONTH(S) FROM		
- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.						
- If the p - If NO p - Failure - Any re	period for reply specified above is less than thirty (30) days, a reply within period for reply is specified above, the maximum statutory period will apply to reply within the set or extended period for reply will, by statute, cause ply received by the Office later than three months after the mailing date of patent term adjustment. See 37 CFR 1.704(b).	and will expire SIX the application to b	(6) MONTHS f ecome ABAND	from the mailing date of this communication. ONED (35 U.S.C. § 133).		
Status						
1) 💢	Responsive to communication(s) filed on Jun 3, 2	003		•		
2a) 🗌	This action is <b>FINAL</b> . 2b) 🗓 This ac	tion is non-fi	nal.			
3) 🗆	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.					
Disposi	tion of Claims					
4) 💢	Claim(s) 1, 2, 9-11, 16, 17, 24-26, 31, 32, and 3	9-41		is/are pending in the application.		
4	a) Of the above, claim(s)			is/are withdrawn from consideration.		
5) 🗆	Claim(s)			is/are allowed.		
6) 💢	Claim(s) 1, 2, 9-11, 16, 17, 24-26, 31, 32, and 3	9-41		is/are rejected.		
7) 🗆	Claim(s)			is/are objected to.		
8) 🗆	Claims		are subject	to restriction and/or election requirement.		
Applica	ition Papers					
9) 🗆	The specification is objected to by the Examiner.					
10)	10) ☐ The drawing(s) filed on is/are a) ☐ accepted or b) ☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)	The proposed drawing correction filed on		is: a) □ a	approved b) $\square$ disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) 🗆	13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a)[	a) □ All b) □ Some* c) □ None of:					
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No.					
	3. Copies of the certified copies of the priority application from the International Burnarium Office and Company of the Priority of the Prior	eau (PCT Rul	e 17.2(a)).			
	ee the attached detailed Office action for a list of the		•			
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).						
a) In the translation of the foreign language provisional application has been received.  15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
·	-	c priority and	ei 35 U.S.	C. 33 120 and/or 121.		
Attachm	ienτ(s) otice of References Cited (PTO-892)	4) Interview	V Summarv (PT	O-413) Paper No(s)		
_	otice of Draftsperson's Patent Drawing Review (PTO-948)	_	5) Notice of Informal Patent Application (PTO-152)			
3) [] int	3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6) Other:					

Art Unit: 2141

#### **DETAILED ACTION**

### Title Change

1. The title submitted is acceptable.

## Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 1, 16, 31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, "irrespective of the server having knowledge of the request prior to receipt thereof" in the claims is not enabled in the specification.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-2, 9-11, 16-17, 24-26, 31-32 and 39-41 are rejected under 35 U.S.C. 103(a) as

Application/Control Number: 09/442,906

Page 3

Art Unit: 2141

being unpatentable over applicant's admitted prior art in the background in view of Burnett et al. with Patent Number 6,006,018 and Cox et al. with Patent Number 5,539,757.

Regarding claim(s) 1, 16, 31, Burnett teaches transmitting data between a file system, col. 6. 5, lines 4-7 and 26-27 via client or server, col. 4, lines 44-45. Burnett teaches a file system buffer as "local cache 12A, 12B and 12C", col. 4, lines 49-60 and non-file system buffers as the numerous other buffered data, such as ids, paths, etc., for effective communication, col. 5-6, lines 61-27. Burnett teaches transmitting data between a file system in client servers, col. 4, lines 65-66. Burnett teaches media files with pointers to a file list, col. 5, lines 61-64 and their associated non-file system buffers. Burnett teaches transmitting data between a buffer and the transmission medium thus bypassing-non-system file buffers, col. 4, lines 58-63 of which the server has no prior knowledge of the request. Burnett teaches the invention in the above claim(s) except for explicitly teaching bypassing non-file system buffers. In that Burnett operates to transfer data quickly, the artisan would have looked to the transmission buffering arts for details of implementing buffer bypasses to transmit data. In that art, Hamilton, a related network data transmission device, teaches media files with pointers to a file list, col. 6, lines 34-36, 39-42, 51-59 and col. 7, lines 6-13 and their associated non-file system buffers. Hamilton specifically teaches non-file system buffers as connection parameter related buffers, col. 4, lines 56-57. Further, Hamilton suggests "no system memory buffer copy ... this traditional method is bypassed ... by minimizing data copying", col. 9, lines 59-67, and col. 10, lines 34-39, "to transfer the media data portion of the packet directly from the memory network interface into the main memory or other I/O device memory", col. 10, lines 2-6 will result from bypassing non-file

Art Unit: 2141

system buffers. The motivation to incorporate non-file system buffer bypassing insures that data throughput speed can be increased. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the non-system file buffer bypassing as taught in Hamilton into the transmission system described in the Burnett patent because Burnett operates with real time data transfers and Hamilton suggests that optimization can be obtained with non-system file buffer bypassing system data transfers. Therefore, by the above rational, the above claim(s) are rejected.

- 7. Regarding claim(s) 2, 17, 32, Hamilton teaches passing said data to a storage medium, col. 5, lines 36-42.
- 8. Regarding claim(s) 9, 24, 39, Hamilton teaches sending data to a receiver, col. 8, lines 1-3.
- 9. Regarding claim(s) 10-11, 25-26, 40-41, Hamilton teaches a routine to provide pointers to said sent data, col. 8, lines 39-43 and col. 7, lines 51-52.
- 10. Claims 1-2, 9-11, 16-17, 24-26, 31-32 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in the background in view of Ledain et al. with Patent Number 6,021,408 and Hamilton et al. with Patent Number 5,799,150.
- 11. Regarding claim(s) 1, 16, 31, Applicant's Background Art teaches transmitting data between a file system as "Distributed File Services (DFS) systems data is moved from one set of buffers within the server to another set of buffers within the server", page 1, lines 14-17. Applicant's Background Art teaches the invention in the above claim(s) except for explicitly

Art Unit: 2141

teaching bypassing non-file system buffers. Hamilton teaches transferring data in a network environment. Hamilton teaches media files with pointers to a file list, col. 6, lines 34-36, 39-42, 51-59 and col. 7, lines 6-13 and their associated non-file system buffers. Hamilton teaches transmitting data in a computer network, col. 9, lines 13-14. Hamilton teaches bypassing system buffers as "no system memory buffer copy ... this traditional method is bypassed ... by minimizing data copying", col. 9, lines 59-67, and col. 10, lines 34-39, "to transfer the media data portion of the packet directly from the memory network interface into the main memory or other I/O device memory", col. 10, lines 2-6. Hamilton teaches the invention in the above claim(s) except for explicitly teaching the server having no prior knowledge of the request. In that Hamilton operates to transfer data quickly the artisan would have looked to the transmission buffering arts for details of implementing buffer bypasses to transmit data. In that art, Ledain, a related network data transmission device, teaches "a highly throughput optimized apparent filesystem", col. 9, lines 33-34 in order to provide quick data throughput in a server, col. 8, lines 43-44, col. 2, lines 15-28. Ledain specifically teaches the routing of filesystem data through buffers, col. 9, lines 25-29 without knowledge as implied by the necessity of a log, col. 8, lines 23-26. Further, Ledain suggests the applicability to log "data block read or write requests", col. 19, line 53 which will result from its implementations. The motivation to incorporate no knowledge of the requests insures that data throughput speed can be increased. Thus, it would have been obvious to one of ordinary skill in the art to incorporate no knowledge of the requests as taught in Ledain into the transmission system described in the Hamilton patent because Hamilton operates with real time data transfers and Ledain suggests that optimization can be

Art Unit: 2141

obtained with file system data transfers by simply logging data transfers instead of maintaining transfer request updates and their associated buffers. Therefore, by the above rational, the above claim(s) are rejected.

- 12. Regarding claim(s) 2, 17, 32, Hamilton teaches passing said data to a storage medium, col. 5, lines 36-42 and Ledain teaches mass storage mediums interconnected with a file system, col. 8, lines 47-5 0
- 13. Regarding claim(s) 9, 24, 39, Hamilton teaches sending data to a receiver, col. 8, lines 1-3.
- 14. Regarding claim(s) 10-11, 25-26, 40-41, Hamilton teaches a routine to provide pointers to said sent data, col. 8, lines 39-43 and col. 7, lines 51-52.

### Response to Amendment

- 15. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.
- 16. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.
- 17. Applicant suggests the "specification explicitly states that 'no advance notice or prediction on the access pattern of data in the files is necessary", Paper No. 8, Page 10, lines 6-7. However, the claims specifically require "irrespective of the server having knowledge of the request prior to receipt thereof" which can not be logically deduced from the sequence or pattern of data received since this is not related to if one had knowledge of the request. Thus,

Page 7 Application/Control Number: 09/442,906

Art Unit: 2141

Applicant's arguments can not be held as persuasive regarding patentability.

- 18. Applicant suggests Burnett teaches "a server node retrieves the file and stores it in a server cache" for direct transmission and that "this is very different from the data transmission recited", Paper No. 8, Page 12, lines 24-26. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the cited portions of the references and relevant portions of the reference. In an effort to further prosecution, the applicant noted "those data movements increase processing time at the server", Paper No. 8, Page 12, line 13 and the art is replete with "many different bypass mechanisms", col. 3, lines 31-32 in Ledain and as admitted in Burnett's teachings. It is noted that a vague and not well defined non-file system buffer in the arts is used in the claims that may provide novelty when many bypass mechanisms have been developed because the references teach numerous non-file system buffers when read broadly. Thus, Applicant's arguments can not be held as persuasive regarding patentability.
- 19. Applicant suggests Hamilton "is very different from the applicant's invention", Paper No. 8, Page 14, line 25 and "Hamilton relies on the server having advance knowledge of the client's read request", Paper No. 8, Page 15, lines 2-3. Applicant's arguments fail to comply with 37 CFR 1.111(b) in regard to their differences because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the cited portions of the references and relevant portions of the reference. In an effort to further prosecution, the applicant noted that the server

Art Unit: 2141

relies on advance notice which is true, but this does not obfuscate Hamilton's teaching that buffers are bypassed for direct communication, i.e. "the buffer bypassing in Hamilton occurs at the client", Paper No. 8, Page 15, lines 14-15 since the art clearly suggests many bypassing mechanisms can be performed at the client or server depending on their role. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

Art Unit: 2141

#### Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

- 21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (703) 305-4003. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.
- 22. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605.
- 23. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605...

Stephan Willett

Twe Willet

Patent Examiner

August 14, 2003